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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/722,133 11/26/2003 Takashi Fujita 062709-0119 4657 EXAMINER 22428 7590 05/12/2005 FOLEY AND LARDNER WALBERG, TERESA J SUITE 500 ART UNIT PAPER NUMBER 3000 K STREET NW

3753
DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | 6 | |
|--|---|--|
| | Application No. | Applicant(s) |
| | 10/722,133 | FUJITA ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Teresa J. Walberg | 3753 |
| The MAILING DATE of this communication a | ppears on the cover sheet w | ith the correspondence address |
| Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory periol - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | . 1.136(a). In no event, however, may a reply within the statutory minimum of third d will apply and will expire SIX (6) MON ate, cause the application to become AE | reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |
| Status | | |
| 1) Responsive to communication(s) filed on | | |
| ** | — iis action is non-final. | |
| 3)☐ Since this application is in condition for allow | ance except for formal matt | ers, prosecution as to the merits is |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D |). 11, 453 O.G. 213. |
| Disposition of Claims | | |
| . 4)⊠ Claim(s) <u>1-13</u> is/are pending in the applicatio | ın | |
| 4a) Of the above claim(s) is/are withdr | | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1-4,6,8,9,12 and 13</u> is/are rejected. | | |
| 7) Claim(s) is/are objected to. | | |
| 8) Claim(s) are subject to restriction and | or election requirement. | |
| Application Papers | | |
| _ | | |
| 9) The specification is objected to by the Examir10) The drawing(s) filed on 26 November 2003 is. | | I objected to by the Everyines |
| | | · |
| Applicant may not request that any objection to th Replacement drawing sheet(s) including the corre | • | , , |
| 11) The oath or declaration is objected to by the I | · · · · · · · · · · · · · · · · · · · | • |
| • | Examiner. Note the attached | office Action of form 1 10-102. |
| riority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreig | n priority under 35 U.S.C. § | 3 119(a)-(d) or (f). |
| a)⊠ All b)□ Some * c)□ None of: | | |
| 1.⊠ Certified copies of the priority docume | | |
| 2. Certified copies of the priority docume | | · · · · · · · · · · · · · · · · · · · |
| 3. Copies of the certified copies of the pri | = | received in this National Stage |
| application from the International Bure | , ,, | |
| * See the attached detailed Office action for a lis | st of the certified copies not | received. |
| | | |
| attachment(s) | | |
|) Notice of References Cited (PTO-892) | | Summary (PTO-413) |
| () Notice of Draftsperson's Patent Drawing Review (PTO-948) () ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 | | s)/Mail Date nformal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/28/04</u> . | 8) 10ther: | |

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DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Simpson (4,341,346).

Simpson discloses a heat exchanger (Fig. 1) having the claimed structure including a header pipe (12), an inlet manifold (25), an outlet manifold, a first coupling member (34), a second coupling member (col. 3, lines 30-32), first and second pipe side connection holes (Fig. 1), and first and second manifold side connection holes (Fig. 1).

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson (4,341,346) in view of Sumikawa et al (4,266,604).

Simpson discloses a heat exchanger having the claimed structure with the exception of the coupling member including a plurality of coupling holes with identical diameters. However, Sumikawa et al disclose a coupling member (see

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Figs 9 and 10) which includes a plurality coupling holes having identical diameters. It would have been obvious in view of Sumikawa et al to provide a coupling member with a plurality of coupling holes in the heat exchanger of Simpson, the motivation being to reduce the number of parts used in manufacturing the device.

5. Claims 9, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson (4,341,346) in view of Sumikawa et al (4,266,604) as applied to claims 4, 6, and 8 above, and further in view of Rich (6,024,086).

Simpson in view of Sumikawa et al disclose a heat exchanger having the claimed structure with the exception of the header pipe including a plurality of fluid circulation holes. However, Rich discloses a heat exchanger including a header pipe having a plurality of fluid circulation holes. It would have been obvious in view of Rich to use a header pipe having a plurality of fluid circulation holes in the heat exchanger of Simpson in view of Sumikawa et al, the motivation being to reduce the number of parts used in manufacturing the device.

6. Claims 5, 7, 10, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mueller, Scholl, Sadler, Buckley, and Ichiyanagi are cited to show tube connectors.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Teresa J. Walberg Primary Examiner

Toresaf Malkey

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